CRTP-S001-

(18)

4/28/98

NOTES FROM 4/24/98 CRT PROJECT TEAM CONFERENCE CALL ON TRANSPORTATION/PACKAGING ISSUE

Attendees

John Gale, DOT
David Isaacs, EIA
David Lennett, Consultant to the Workgroup
Gary Light, ICF
Jeff Lowry, Techneglas
Charlotte Mooney, EPA OSW
Gene Proch, Corning-Asahi
Mike Winka, NJ DEP

REVIEW OF CURRENT STATUS (FROM ISSUE PAPER (ATTACHED)) WITH JOHN GALE

John Gale, DOT, confirmed that the materials we are discussing are not individually listed as DOT hazardous materials and thus currently are hazardous materials only if they are hazardous waste, which for DOT's hazardous materials purposes is defined as anything requiring a manifest. Thus, if the streamlined system does not require a manifest, these materials will not be hazardous materials and will not be subject to the DOT hazardous material regulations.

There was some subsequent conversation concerning whether any of these materials could be considered to be individually listed as DOT hazardous materials under the hazardous substance listing for lead. John Gale explained that if you follow the regulations through[1] you eventually get to an explanation that this listing would only

[1] See 49 CFR 171.8 definition of 'hazardous substance,' which explains applicability to quantities above the Reportable Quantity (RQ) in one container, and refers you to 49 CFR 172.101 Appendix A (list of hazardous substances). See the listing for 'lead,' and the associated footnote which reads "The RQ for these substances is limited to those pieces of the metal having a diameter smaller than 100 micrometers (.004 inches)." See also 40 CFR 172.101 hazardous materials table listings for 'hazardous substances' and 'environmentally hazardous substances.'

apply in a situation where, in any one container there was more than 10^2 pounds of lead that is in pieces having a diameter smaller than 100 micrometers (0.004 inches). Note that as I read the listing it applies to lead metal, not lead compounds (e.g., lead oxide), but there is also some reference to 'mixtures' which may pick up compounds? I will check with John Gale on this. Gene Proch offered to investigate whether Corning-Asahi has any data on the distribution of particle size in cullet which might give us an idea as to whether this may be an issue for broken glass or cullet. In any case, even if any of these materials are listed, all that means is that the DOT regulations apply independent of the hazardous waste manifest. I think this is fine and would not conflict with the streamlined CRT system we are talking about.

In going over the chart of DOT requirements for hazardous materials, John Gale explained that in DOT parlance the term 'marking' means to mark certain words on a package. 'Labeling' means putting certain symbols on a package, and 'placarding' is putting certain symbols on a vehicle. The group agreed that the 'label' we have been talking about would be considered 'marking' using DOT terminology.

PROPOSED PACKAGING/TRANSPORTATION STANDARD FOR CRTs

Given that not requiring a manifest for these materials would remove all DOT hazardous materials requirements, we went through all of the requirements and discussed whether any controls are necessary in place of the removed requirements. The group agreed, provisionally, that the packaging and labeling requirements below are appropriate in place of the DOT hazardous materials requirements. Note that at Norm Riley's suggestion, the words "contains lead" were added to the marking text to indicate what the hazard is for these materials. The idea was that this would provide sufficient information to emergency responders to allow them to manage any released materials properly. Thus, for purposes of informing emergency responders, this marking requirement would replace the manifest and

1) General Packaging Standard:

   a) (I) Package TVS, monitors, or whole CRTs in a way that minimizes breakage *during normal shipping conditions.*
   (ii) The packaging must minimize releases to the environment if unintentional breakage does occur. *For example, if TVS and monitors are shrink wrapped onto pallets in such way that broken pieces of glass might not be contained, the material should be placed in an outside package (e.g., a box or a vehicle body) that will minimize releases.*

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[2] I think we may have said one pound, in the most recent regs it is 10 pounds. I will check with John Gale on this.

b) Package broken TVS/monitors/CRTs, CRT glass pieces, or CRT glass cullet in siftproof packaging *(i.e., a container or vehicle)* that is constructed, filled, and closed so that:
(I) There will be no identifiable releases of CRT glass to the environment, and
(ii) The effectiveness of the package will not be reduced during normal shipping conditions. For example, packages should be resistant to puncture by glass pieces.

'Siftproof' packaging means packaging impermeable to dry contents, including fine solid material produced during transportation, or packaging that prevents particles from being released from the package.

2) Mark materials with the following text:
"Cathode ray tubes (CRT) or CRT glass to be used in CRT glass manufacturing. *Contains lead.* Do not mix with other glass or materials."

OTHER/STATE REQUIREMENTS

John Gale confirmed that there are standard safety requirements for vehicles which are implemented by states, but that there are no other requirements for transportation that we should be concerned with.

John also explained that by law the DOT hazardous materials requirements preempt any state requirements for the same material. His sense was that preemption would apply in cases where a state has not picked up the streamlined CRT system. In other words, that state laws requiring haz mat standards (triggered by the manifest) are not consistent with and would be preempted by DOT's federal rules not requiring haz mat standards if a manifest is not required federally. My understanding was, however, that DOT's federal (non) rules would not preempt the state from continuing to require the manifest as an EPA requirement rather than a DOT requirement. I will check this again with John also.

ATTACHMENT: BACKGROUND ISSUE PAPER ON TRANSPORTATION/PACKAGING ISSUE

4/24/98 Draft

CATHODE RAY TUBES (CRTs): TRANSPORTATION/PACKAGING ISSUE

CURRENT STATUS

DOT regulates transportation of 'hazardous materials.' Under DOT's regulations:

-- TVS, computer monitors, whole cathode ray tubes (CRTs), leaded glass pieces, and leaded glass cullet are not individually listed as hazardous materials on the DOT hazardous materials table (49 CFR Part 172)

-- Materials that, under EPA's regulations, must be shipped using a hazardous waste manifest are considered DOT hazardous materials (49 CFR 171.3, 171.8)

-- Those hazardous wastes that are not otherwise individually listed as hazardous materials are classified as 'hazardous waste, liquid, n.o.s.' or 'hazardous waste, solid, n.o.s.' (49 CFR 172.101) (n.o.s. = not otherwise specified)

-- Thus, regulated CRTs that are TC hazardous (which must be shipped using a hazardous waste manifest), are subject to the DOT hazardous materials shipping regulations and are classified as 'hazardous waste, solid, n.o.s.'. As such, there are requirements specified for packaging, shipping papers, marking, labeling, etc. **SEE CHART.**

DOT GENERAL PACKAGING REQUIREMENTS

At 49 CFR 173.24 DOT has general requirements for packagings and packages. See faxed pages.

Also: 49 CFR 171.8 defines 'siftproof packaging' as a packaging impermeable to dry contents, including fine solid material produced during transportation."

UNDER CSI RECOMMENDED CRT STREAMLINED REGULATIONS

- No hazardous waste manifest will be required for transportation. Since CRT materials are not individually listed, once a manifest is not required they will no longer be subject to DOT's hazardous materials transportation requirements.

- See chart for recommendation for crt streamlined system requirements, including the following suggested packaging standard:

  1) Package TVS, monitors, or whole CRTs in a way that minimizes breakage under conditions normally incident to transportation and that minimizes releases to the environment if unintentional breakage occurs.

  2) Package broken TVS/monitors/CRTs, CRT glass pieces, or CRT glass cullet in siftproof bulk or non-bulk packaging that is constructed, filled, and closed so that there will be no identifiable releases of CRT glass to the environment and the effectiveness of the package will not be reduced during normal shipping conditions (e.g., package is resistant to puncture by glass pieces).

  3) alternative u waste language: in a container that remains closed, structurally sound, compatible with the material, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions

- Norm Riley suggests adding "contains lead" to label text.

  "Cathode ray tubes (CRT) or CRT glass to be used in CRT glass manufacturing. **Contains lead.** Do not mix with other glass or materials."

- Question: Are there any other transportation requirements that would apply? State and local vehicle safety requirements? Any thing else? (John Gale?)

SUBJECT	DOT REG	CURRENT REQUIREMENTS	REC CRTs
Packaging	173.213, .240	general packaging requirements (49 CFR 173.24, see below); specific authorized packages; and specifications for authorized packages (design specs, drop tests, etc)	Deve pack
Shipping Paper	172.200	Hazardous waste manifest	None
Marking	172.300+	non-bulk package: mark package w/ proper hazardous material shipping name and identification number (e.g., NA3077), bulk package: mark w/ identification number	Gene discu
Labeling	172.400+	non-bulk, and most bulk packages (unless placarded): label w/ diamond symbol for 'Class 9 -- miscellaneous hazardous materials'	Gene discu
Placarding	172.500+	most bulk packages: placard w/ similar diamond symbol for 'Class 9 -- miscellaneous hazardous materials' [John Gale corrects: no placarding for Class 9 materials]	Gene discu
Emergency Resp. Info	172.600+	emergency response info must be immediately available to first responders	Gene suffic
Training	172.700+	haz mat requirements and safety training	not n

* Suggested general packaging standard:

1) Package TVS, monitors, or whole CRTs in a way that minimizes breakage under conditions normally incident to transportation and that minimizes releases to the environment if unintentional breakage occurs.
2) Package CRT glass or CRT glass cullet in siftproof bulk or non-bulk packaging that is constructed, filled, and closed so that there will be no identifiable releases of CRT glass to the environment and the effectiveness of the package will not be reduced during normal shipping conditions (e.g., package is resistant to puncture by glass pieces).

** Norm Riley suggests adding "contains lead" to label text.